



Kelken Construction Systems
 550 Hartle Street
 Suite C
 Sayreville, NJ 08872
 (732) 416-6730 FAX (732) 416-6733

US Metric Chart ASTM F1554 Grade 105
1/2"-2 1/2" 105 KSI Yield 125 KSI Tensile
2 1/2"- 3" 95 KSI Yield 115 KSI Tensile

Anchor Diameter in. (mm)	Drill Diameter in. (mm)	Tensile Stress Area	Embed Depth in. (mm)	Yield lb (kn)	Tensile lb. (kn)	Shear lb. (kn)
1/2 (12.7)	5/8 (15.9)	0.142	6 (152)	14900 (66.2)	17750 (79)	8875 (39)
5/8 (15.9)	3/4 (19.1)	0.226	8.5 (215.9)	23730 (106)	28250 (126)	14125 (62.8)
3/4 (19.1)	7/8 (22.2)	0.334	9 (228.6)	35070 (155.9)	41750 (185.7)	20875 (92.8)
7/8 (22.2)	1 (25.4)	0.462	10.5 (266.7)	48510 (216)	57750 (257)	28875 (128)
1 (25.4)	1 1/8 (28.6)	0.606	11.5 (292.1)	63630 (283)	75750 (337)	37875 (168)
1 1/8 (28.6)	1 1/4 (31.8)	0.763	14 (355.6)	80115 (356)	95375 (424)	47688 (178.1)
1 1/4 (31.8)	1 3/8 (34.9)	0.969	17 (431.8)	101745 (452.5)	121125 (538.7)	60562 (269.3)
1 3/8 (34.9)	1 1/2 (38.1)	1.155	21 (533.4)	121275 (539)	144375 (642)	72187 (321)
1 1/2 (38.1)	1 3/4 (44.4)	1.405	25 (635)	147525 (654.9)	175625 (781.2)	87812 (390.6)
1 3/4 (44.4)	2 (50.8)	1.900	29 (736.6)	199500 (887.4)	237500 (1056.4)	118750 (528.2)
2 (50.8)	2 1/4 (57.2)	2.500	32 (812.8)	262500 (1170)	312500 (1390)	156250 (695)
2 1/4 (57.2)	2 1/2 (63.5)	3.250	36 (914.4)	341250 (1520)	406250 (1810)	203125 (904)
2 1/2 (63.5)	2 3/4 (69.9)	4.000	41 (1041.4)	380000 (1690)	460000 (2046)	230000 (1023)
2 3/4 (69.9)	3 (76.2)	4.930	42 (1066.8)	468350 (2080)	566950 (2522)	283475 (1261)
3 (76.2)	3 1/4 (82.5)	5.970	60 (1524)	567150 (2520)	686550 (3054)	343275 (1527)

Steel Strength ASTM F1554 Grade 105
 Yield = $F_y \times$ Tensile Stress Area
 Tensile = $F_t \times$ Tensile Stress Area
 Shear = $.50 \times$ Ultimate Steel Strength

Based on 3500 psi or greater compressive strength concrete 28 days old.

All values based on properly installed Keligrout/Keligrout 101-p per Technical Data Sheets